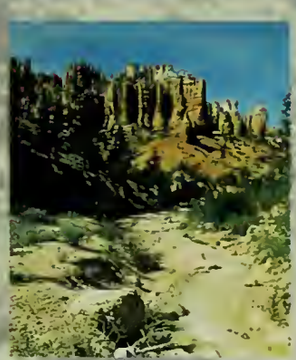
Managing Change in Rural Communities

The Role of Planning and Design



National Endowment for the Arts
Design Program

U.S. Department of Agriculture
Natural Resources Conservation Service

On October 20, 1994, the Soil Conservation Service became the Natural Resources Conservation Service. To avoid confusion, the agency is referred to as the Natural Resources Conservation Service throughout this publication, even though it was the Soil Conservation Service at the time of the Rural Design Demonstration Project.

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Preface

Americans who make their living from the land — and those who live in small communities closely bound to the land — know the importance of stewardship. Conservation and development, when balanced and complementary, enable families and towns to be both economically and socially viable, while ensuring that future generations will enjoy rural America's bounty and heritage. Such stewardship applies equally to the environment humans have made as it does to natural resources.

This booklet is about stewardship — with a twist. It's about the benefits of adding design skills to the mix of talents found in rural America. Specifically, it recounts the experiences of three landscape architects whom our agencies placed in three Resource Conservation and Development (RC&D) areas for a 2-year pilot project. We asked them to apply their skills within the context of RC&D objectives chosen by local citizens. They used inexpensive computer-based imaging technology to communicate graphically various conservation and development alternatives.

The results in Georgia, Iowa, and Utah were exciting and gratifying: citizens were eager both to improve the stewardship of their land and to participate in shaping their communities in new and productive ways. We offer here a sampling of the stories and the techniques used, as well as information about available resources.

As you can tell, this booklet is also about creative partnerships among the design professionals and the many public and private sector players who took part in RC&D-sponsored projects. It's also a celebration of a unique partnership between our agencies. Signifying the breadth of its conservation concerns and its goal of bringing appropriate technical assistance to bear on rural resource issues, the Soil Conservation Service (SCS) has changed

its name to the Natural Resources Conservation Service (NRCS). For its part, the National Endowment for the Arts (NEA) places a priority on serving the cultural needs of all rural communities, both by supporting indigenous talent and by bringing the best in the performing, visual, and literary arts to citizens in small towns. Through its Design Program, NEA also supports community projects in architecture, landscape architecture, historic preservation, planning, and other design fields. Shaping town and countryside in ways that are pleasing to the eye while also meeting both human and ecosystem needs is truly an art, and one in which all people can participate.

"A productive nation in harmony with a quality environment" is the vision of the Natural Resources Conservation Service. But in reality, it should be every citizen's credo, for every American, whether in rural, suburban or urban settings, receives the benefits and therefore bears the responsibility for our use of this country's extraordinary rural landscape. We hope you will find in this booklet both inspiration and down-to-earth practical information to apply to resource issues in your community and to share with others.

Jane Alexander
Chairman
National Endowment
for the Arts

Paul W. Johnson
Chief
Natural Resources
Conservation Service

Introduction

Across rural America, many communities face the prospect of change. Their economies rely less and less on the traditional bedrock sources of agriculture, timber, and mining. Whereas some communities are in decline and losing population, in others, leaders are discovering new ways to create products from farm and forest, such as developing specialized truck farming to serve new urban markets. Still others have attracted service-oriented businesses, such as data-processing and catalog marketing firms freed from urban dependence by new telecommunications technologies. Many also are becoming exurban bedroom communities for distant cities, or attracting second-home developments whose residents are drawn by scenic and recreational opportunities.

However economic development comes about, it can place growing burdens on the quality and character of rural landscapes and the amenities offered by smalltown life. If not properly managed, growth can harm rather than enhance the diverse natural and cultural resources that rural areas offer.

Wherever change is affecting the way towns and countryside look, citizens and their elected officials are searching for techniques to sustain a balance between the parallel goals of development and resource conservation. It is in this area that design professionals can make a significant contribution to local decisions about land use and economic diversification, while conserving the quality of the places where people live and work.

A Design and Conservation Partnership

This was the inspiration behind the Rural Design Demonstration Project, a joint endeavor of the U.S. Department of Agriculture and the National Endowment for the Arts. Sponsored by Agriculture's Natural Resources Conservation Service and NEA's Design Program, the project placed design professionals in planning assistance roles in Georgia, Iowa, and Utah.

The goal of the demonstration project was to explore, over a 2-year period, how design professionals, in this case landscape architects, can help local people take advantage of resource opportunities and solve environmental problems. The potential for using these design skills in rural settings remains largely untapped.

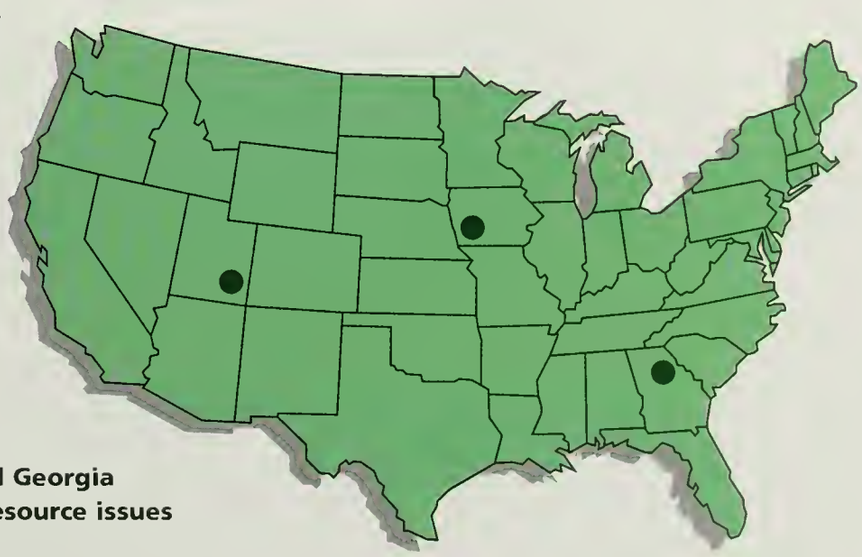
Coordinator Mac Hayes meets with planning committee for a greenway project sponsored by the Oconee River RC&D Council, Watkinsville, Georgia.

The President's Council on Rural America recommended in 1992 that government "adopt a flexible approach to locally-conceived rural community development, supporting it with technical assistance, with funding support, and with the involvement of businesses, educational institutions, private foundations and volunteers." The demonstration project fit well into this broad philosophical framework by showing that design professionals can assist rural Americans in their search for sustainable economies while preserving the character of their landscapes and small towns.

The RC&D Framework

In partnership, the Natural Resources Conservation Service and the Design Program were uniquely qualified to introduce the skills of landscape architects into the planning processes of rural areas. The Natural Resources Conservation Service has long administered programs to help people conserve, improve, and sustain natural resources and the environment on private lands. Unlike such agencies as the National Park Service, U.S.D.A. Forest Service, and Bureau of Land Management, which address federally owned land, the Natural Resources Conservation Service concentrates on helping private landowners and local units of government. One way it does this is through the Resource Conservation and Development (RC&D) Program, established by Congress in 1962. The nationwide network of RC&D areas was founded specifically to encourage locally sponsored rural efforts.

In 1988, the Design Program commissioned a study on the use of landscape architects by Federal agencies. It pointed out that the profession's contributions in broad areas of environmental design, planning, and management remained largely unknown and underutilized in much of rural America. This study led the two agencies to choose the RC&D Program for the Rural Design Demonstration Project because it encourages active involvement of local residents



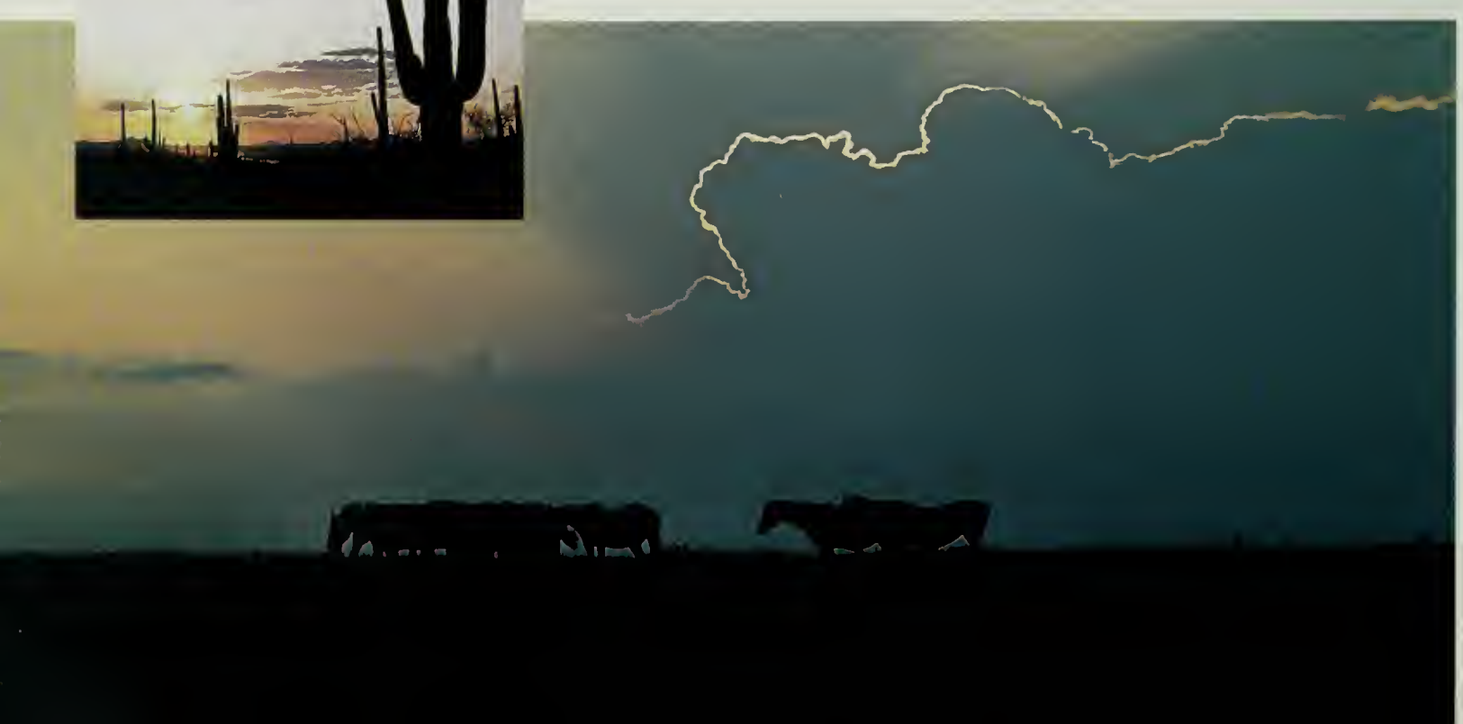
RC&D areas selected in Utah, Iowa, and Georgia brought a variety of community and resource issues to the demonstration project.

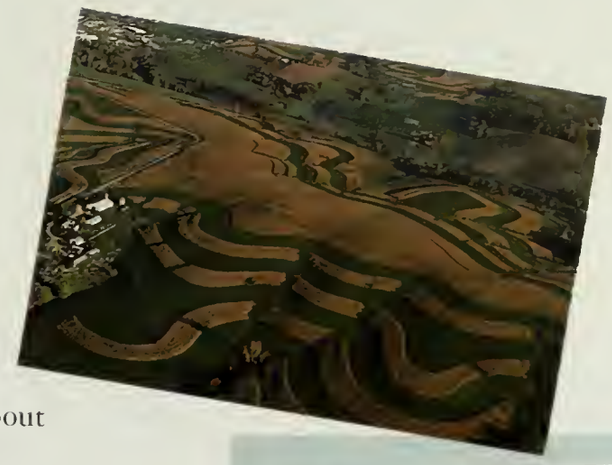
within a public-private organizational structure that effectively accomplishes lasting change in rural communities. Each of the 277 RC&Ds in the Nation is a non-profit, independent organization headed by a council of citizens and local government officials in a multi-county area. The Natural Resources Conservation Service employs a full-time coordinator in each RC&D and provides both staff and funding support. The coordinator develops public-private partnerships and seeks additional funds needed to implement projects adopted by his or her council. Local initiative, an entrepreneurial spirit, and teamwork are the hallmarks of the RC&D approach.

The interdisciplinary emphasis of the Natural Resources Conservation Service and the local framework provided by the RC&Ds seemed ideally suited to the Rural Design Demonstration Project. Three RC&D areas were competitively chosen to participate: Oconee River in northeast Georgia, Golden Hills in southwest Iowa, and Castleland in southeast Utah.

Tapping Design Skills

Regardless of their specialization, design professionals such as architects, landscape architects, planners, and engineers are trained in certain fundamental skills, which include analyzing resources and user needs, envisioning alternative solutions, and communicating those alternatives to others. They are accustomed to working in interdisciplinary teams with fellow designers and





collaborating with a variety of other specialists, such as sociologists, economists, and developers, whose skills are necessary in understanding and bringing about appropriate change in the built environment.

Whether responding to the needs of a specific site or developing a management plan for a broad area of the countryside, landscape architects take a comprehensive approach to the environment, weighing the functional, cultural, and aesthetic consequences of design alternatives. In doing so, they must often take into consideration the many diverse and sometimes competing interests in communities and regions where people care deeply about their surroundings. As design professionals, they are able to synthesize and translate their knowledge and the specialized input of others into comprehensive plans or design concepts that will meet the varied needs of clients and user groups while also respecting the landscape's role in the larger ecosystem.

The different environmental, economic, and social conditions in the three pilot RC&D areas provided a diverse yet fitting laboratory in which to put this array of design skills to work. The Natural Resources Conservation Service selected the following professionals for the job: Alison Krohn, for the Oconee River RC&D in Watkinsville, Georgia; Mimi Askew, for the Golden Hills RC&D in Oakland, Iowa; and Ken Ruhnke, for the Castleland RC&D in Price, Utah.

Demonstration Activities

The balance of this booklet highlights some, but not all, of the activities undertaken by the three landscape architects in the demonstration areas. During their 2 years in the field, these individuals responded to a wide variety of projects adopted by their respective RC&D councils, which also encouraged them to seek out additional opportunities. Their level of involvement ranged from informal consultation on site-specific design problems and opportunities to facilitating comprehensive planning efforts. During the course of the demonstration project, the Natural Resources Conservation Service and NEA selected nine projects, three from each RC&D, for documentation as case studies.

As Federal employees dealing with private land, the landscape architects limited their involvement to providing conceptual design services. Therefore, when the implementation phase of an activity was reached, detailed design and construction drawings and plans were undertaken by the private sector. Another aspect of the demonstration project involved testing the effectiveness of image-processing technology and a countryside assessment methodology. The landscape architects were asked to adapt these tools to local circumstances, as appropriate, and to evaluate their applicability in rural situations.

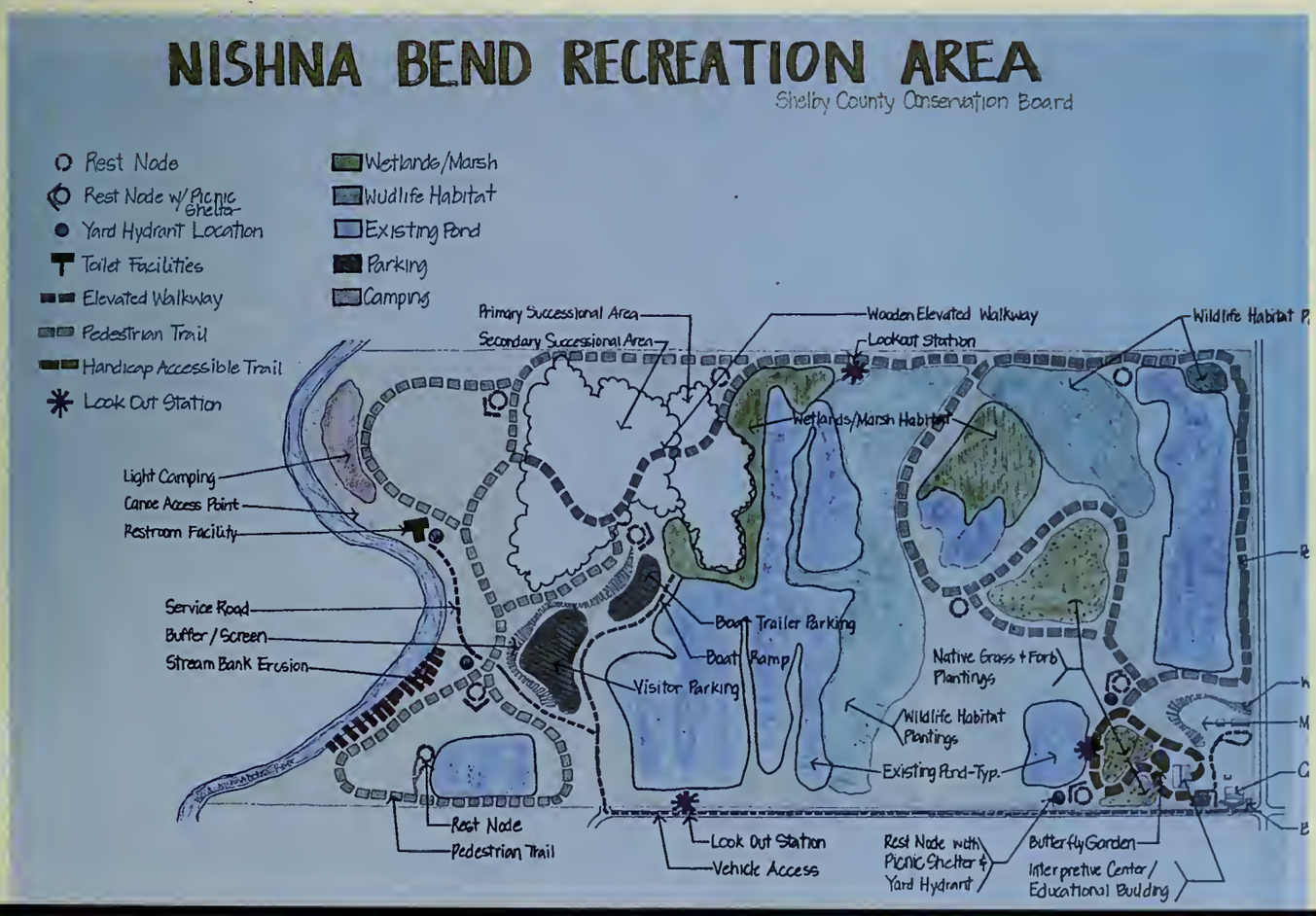
Case studies and related information are available from each of the RC&D offices participating in this project. In addition, reports on image-processing and countryside assessment can be obtained from the Natural Resources Conservation Service. For information on how to obtain them and for additional sources of assistance, see page 40.

Landscape architect Mimi Askew *(top)*; eroding channel in deep loess soils (bottom). The Loess Hills border productive farmland along the Missouri River *(opposite, top)*; conceptual plan for recreation area heals environmental problems while providing for diverse uses *(opposite, bottom)*.

PROFILE: Golden Hills RC&D

The Golden Hills RC&D serves eight counties in southwestern Iowa. Bordered by the Missouri River, the area is roughly 90 miles long and 50 miles wide. Although the region's population of 190,167 has remained relatively stable since 1900, there has been a steady shift away from the rural areas to the larger cities and towns, where 72 percent of the people live. The RC&D area derives its name from the deep loess soils, very productive but highly erosive soils found in steep, rolling landscapes. At its western limit, the loess forms spectacular bluffs hundreds of feet high, framing the river with golden hills.

Some of the issues facing the region are soil erosion; the development of recreational and environmental education opportunities; economic diversification to produce off-farm jobs and stabilize the rural population; development of tourism as part of the economic base; and the protection of scenic, natural, and cultural resources in a distinctive landscape. Mimi Askew and the Golden Hills RC&D addressed these issues in a variety of ways, such as educating landusers on methods of stabilizing streambanks, providing environmental materials for schools, and developing a master plan for conversion of abandoned gravel pits into the Nisha Bend Recreation Area.



Creating a Scenic Byway

Golden Hills RC&D, Iowa

For me, it was an opportunity to increase awareness of the Loess Hills. They are very fragile. And we were going to see them down on the river bottom if something wasn't done.

Marland Gammon
Former Mills County Supervisor, Glenwood, Iowa

The Loess Hills region, seven counties which form the southwestern boundary of Iowa along the Missouri River, is often called "Iowa's best kept secret." The region's soils were formed over 10,000 years ago from rocks laid down by massive glaciers during the Pleistocene Ice Age. The movement of the glaciers ground the rocks into silt, which was carried down the river valleys by snowmelt in the slowly warming summers. The fine, lightweight particles then were blown by strong westerly winds into tall bluffs which, over time, have been carved by wind and water erosion into the sharp ridges and deep ravines that characterize the hills today.

Rising hundreds of feet above the adjacent Missouri River floodplain, the hills form a unique environment on the North American continent. The character of the loess soils makes them extremely sensitive to wind and water erosion. Any disturbance of the plant life that protects the surface can be catastrophic. In a lifetime, a small drainage ditch can deepen into a canyon.

For Mimi Askew, who suspected a lack of awareness among local citizens concerning the significance of their region, the character of the hills posed both a challenge and an opportunity. The pressures of new development were creating demand for rock from local quarries, for landfill space, and for exurban housing. At the same time, agriculture and grazing were encroaching upon steeper areas. The threat to landscape integrity created by increased development and changing agriculture created an opportunity to educate residents about the value of their environment and suggested a way to diversify the economic base through tourism. County officials and local organizations approached the Golden Hills RC&D asking for help in expanding upon a fledgling scenic byway effort that had begun in adjacent counties. With approval from the council, Askew worked with more than 140 volunteer residents on the development of what was to become a 221-mile-long central route through the 7 counties, accompanied by 12 excursion loops. The byway offers visitors and residents a means of experiencing the region's variety of scenery and vistas in an organized yet flexible manner.

Scenic view of the Loess Hills *(top)* is altered on computer *(bottom)* to simulate visual impact that quarry operations and roadside signs could have.

As former Supervisor Gammon noted, "We are 15 minutes from downtown Omaha. The project was a catalyst to bring awareness of the hills to people outside. And tourism is definitely picking up." The Loess Hills Scenic Byway hugs the bottom of the bluffs in some locations, offering magnificent views of the region. In other locations, the route travels through the heart of the hills, with breathtaking vistas on both sides of the road. Through the process of assessment, which included identifying natural and cultural resources as well as analyzing visitor facilities and safety factors, the final selection of routes rested on a firm foundation of landscape values as articulated by the people of the Loess Hills. The byway became a reality with official designation by the Iowa Department of Transportation, the posting of route signs, and the production of a descriptive brochure on the

The Loess Hills Scenic Byway offers residents and visitors numerous opportunities to discover and explore the landscape of western Iowa. Whatever their form of transportation, choice of recreation, or length of stay, tourists give a boost to the rural economy.

geology, natural resources, and history of the region. The Loess Hills Scenic Byway was recognized by Scenic America as one of the nation's "Ten Most Outstanding Scenic Byways" in 1992. In addition, the Missouri Valley, Iowa, Welcome Center reported a 237-percent increase in visitors at its facility between 1989 and 1992.

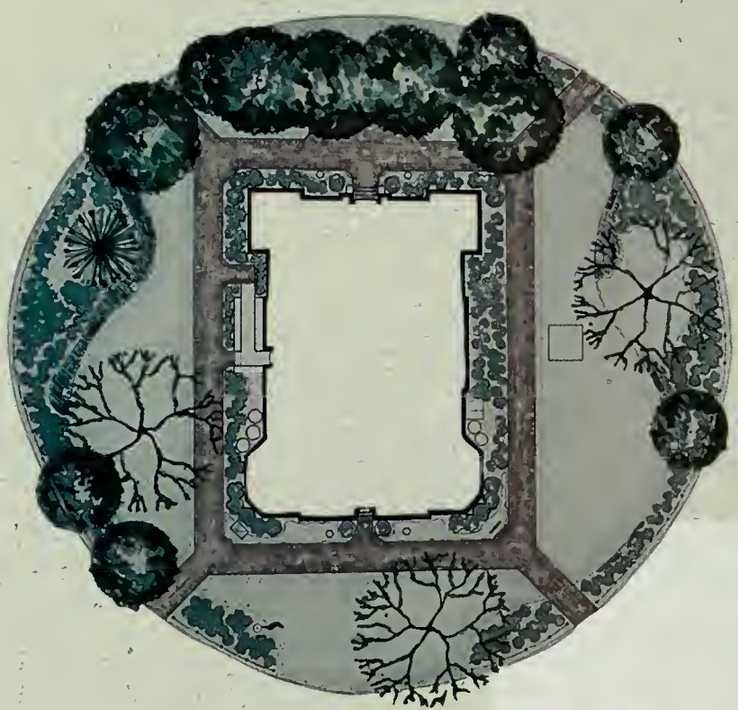
The process of creating the scenic byway revealed that no information had been gathered concerning natural and cultural resources in the seven-county area for conservation planning purposes. This led to formation of the Loess Hills Alliance, a grassroots group concerned with promotion of the scenic byway and with land management issues in the region. Volunteers fanned out beyond the corridors bordering the scenic byway to collect data and gather information from public and private agencies and organizations. The study's final report, entitled Loess Hills Landscape Resource Study, explores the resources of the landscape in detail, including critical resources maps, attitude surveys of residents, and a list of residents' favorite places. It is accompanied by a video, "Ours to Care For: The Loess Bluffs of Western Iowa."

"We surveyed about 500 households for the landscape resource study," said Askew, "and found they have very strong beliefs about land use, scenic value, tourism, and all of the issues that go along with land management."

LOESS HILLS SCENIC BYWAY

Designed to promote leisurely exploration, the scenic byway consists of a 221-mile-long paved "spine" and twelve excursion loops. With funding from the Federal Highway Administration, representatives from the seven counties are now developing a corridor management plan to guide future enhancement, conservation and development of resources and amenities along the route.

PROFILE: Oconee River RC&D



Landscape architect Alison Krohn discusses dairy farm improvements with the Stewart brothers *(above right)*; addressing circulation, drainage and roadside visibility, the plan was featured in Successful Farming magazine *(right)*. Concept plan for a Veterans Memorial Garden around the Danielsville, Ga., courthouse integrates paving, ground cover, evergreens, and deciduous trees *(above)*.

A SUCCESSFUL FARMING
SERVICE TO AGRICULTURE PROJECT

WE MEAN BEAUTIFUL

Join the Stewart family by gussying up your farm or ranch this spring using our step-by-step guide

BY BETSY FREESE
SENIOR EDITOR

Charles and Milton Stewart, Allen Stovall and Richard Stewart (left to right) are beautifying a dairy.

Work will be completed this summer based on a detailed plan.

Managing growth, protecting water quality and preserving rural lifestyles are among the issues facing residents in the RC&D area. Plan *(above)* shows placement of artificial wetlands on a hog farm to reduce ammonia so water can be reused.

The Oconee River RC&D area comprises 10 counties in northeastern Georgia. Stretching from the South Carolina border to metropolitan Atlanta and north to the Appalachian foothills, the area covers 2,987 square miles in the heart of the old Cotton Belt. Poultry production predominates in the northern counties, and cattle or dairy herds are more prevalent in the southern portion. In both areas, red clay Piedmont soils are highly susceptible to erosion. Consequently, improving water quality is one of the Oconee River RC&D Council's most important resource issues.

Diversifying the economy while protecting the rural character of the landscape is another pressing issue as Atlanta pushes eastward, and Athens, home to the University of Georgia, spreads in all directions. Between 1980 and 1990, population within the 10-county area grew by 20 percent, to 277,912. Most of this growth is occurring in rural areas where there is little or no zoning or land use planning. Among the projects designated by the council for design assistance were a veteran's memorial garden, a constructed wetland, a farmstead plan, and a walking tour brochure and public amenity plan for a small town.

Analyzing Highway Alternatives

Comer, Georgia

The video imagery is really valuable in just getting the point across—the audience understands what you're talking about, they get excited.

Alison Krohn
Oconee River RC&D

One of the quickest ways to change a rural community is to widen its major highway. When the Georgia Department of Transportation (GDOT) announced plans to widen State Route 72, linking Atlanta and Columbia, South Carolina, the announcement quickly caught the attention of the residents of Comer, Georgia, a small town located along the highway. Homeowners were concerned with lumber and other heavy trucks coming through their historic neighborhoods, and with access to downtown shops. Merchants worried that a bypass could drain business away. Nearby farmers were troubled by the possibility that a bypass, if adopted, would split fields, making agricultural operations more difficult.

Comer Mayor Dudley Hartel wanted more information on potential impacts, particularly on traffic patterns, and requested assistance from the Oconee River RC&D. Alison Krohn recruited landscape architecture students at the nearby University of Georgia School of Environmental Design to make a thorough study of the road-widening proposals and their anticipated impacts on the community. GDOT proposed three alternates: widening the road through Comer from two to five lanes; splitting traffic into a pair of east- and west-bound streets; and moving the new highway a block south of the existing route, linking it with new construction to the existing road.

"Comer offered enough complexity to make it a good student project," said Krohn, who herself videotaped the proposed routes. The students analyzed each alternative and assisted Krohn in developing a series of visual simulations to help Comer's residents understand what the new highway might look like. A student survey of townspeople revealed varying perspectives and concerns, but also a common interest in preserving the character and vitality of the downtown. At an open house for Comer residents, Krohn presented GDOT's proposed plans and the student analyses of them, along with computer-generated "before and after" views of the streets as they presently are and as they might be if the plans were implemented.

ONE WAY PAIR

Proposed Highway Alignment

*Development pressure downtown; residential use replaced by commercial.

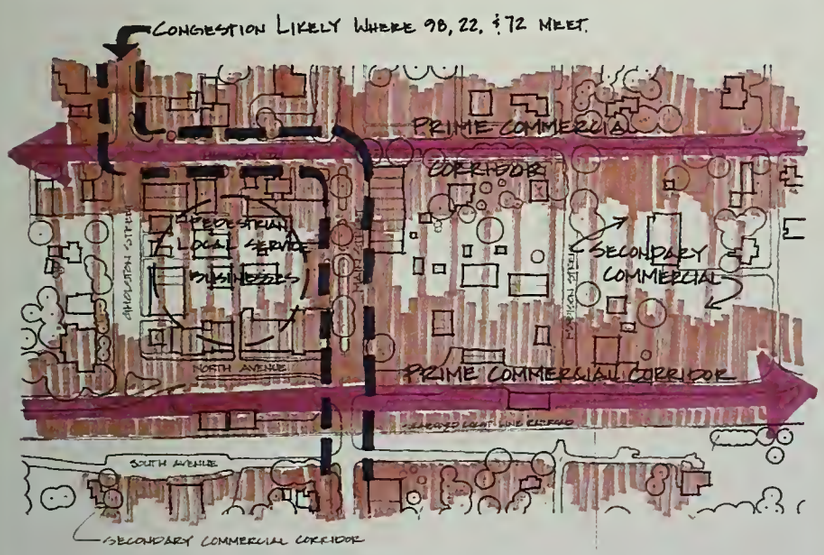
*200% net increase commercial activity.

*Traffic, pollution, and noise increase downtown.

*Cross-town traffic (north-south) more difficult.

*10 (+/-) structures affected.

*TOWN CHARACTER SEVERELY AFFECTED.



COMER, GEORGIA

HIGHWAY 72 IMPACT STUDY

OCONEE RIVER RC&D March 1, 1992

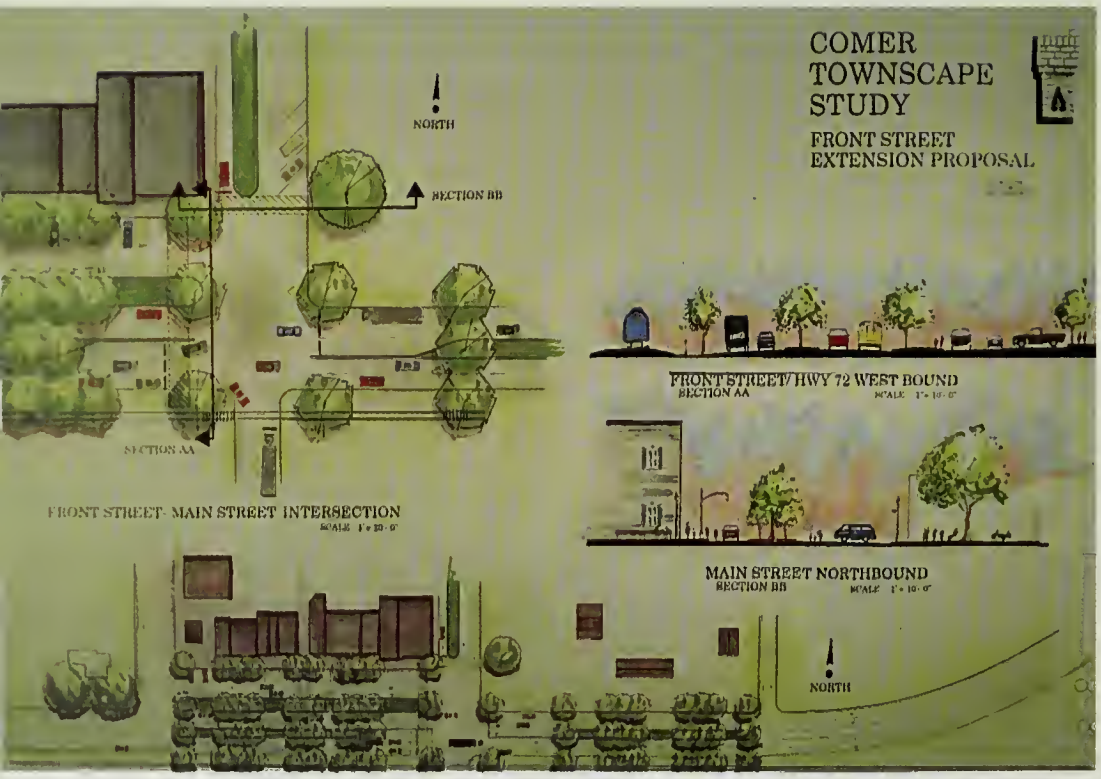
Lumber and other heavy trucks found on many two-lane highways in the area *(top)* present a particular challenge to Comer's downtown and adjacent historic neighborhoods *(bottom)*.

Plan *(above)* shows one option for handling increased traffic through downtown Comer *(right)*, via a pair of one-way roads.

Krohn also called upon assistance from the preservation program at the University of Georgia and the Georgia Trust for Historic Preservation, whose suggestions for potential downtown Comer enhancements, such as trees, awnings, sidewalk repairs and building facade restorations also appeared in the video.

According to Mayor Hartel, the road widening in Comer has been delayed by GDOT for several years, illustrating the long-term nature of professional involvement in rural community design issues. "The work we did will be brought up when we talk about economic development. It provides a baseline for future initiatives," he said.

Although the Comer project has been delayed, it has been the inspiration for successful downtown revitalization in nearby Elberton, Georgia, whose residents saw the benefits of involving a design professional. Other Georgia towns have requested similar assistance.

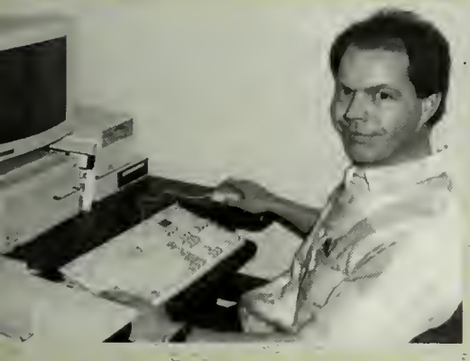


Citizens meet to discuss design options for highway and business district *(above)*; plan prepared by university design class shows possible street and sidewalk improvements *(below)*.

Castleland scenes *(clockwise from above)* — the Crystal Geyser near Green River, a mountain biker, the vast landscape of the LaSal Mountains, and a Navajo ceremony — represent just a few of the varied communities, cultures, and resource issues addressed by landscape architect Ken Ruhnke.

PROFILE: Castleland RC&D

The Castleland RC&D area encompasses 11.2 million acres in four large counties of southeastern Utah. This vast area contains a rugged, beautiful landscape of astonishing variety, ranging from arid desert and sandstone bluffs to deep gorges and alpine forests. In 1990, the total population was only 57,000, with 90 percent concentrated in small towns and cities. Only 16 percent of the land is privately owned. The remainder is either managed by Federal and State governments or falls within the Navajo Reservation



along the border with Arizona. Much of the area has experienced a boom-and-bust economy based on mineral extraction, coal mining, and energy generation. Only 215,000 acres are used for crops, whereas some 7 million acres of private and public lands are devoted to livestock rangeland. To the south, the area centered around Moab has experienced a boom in tourism; in recent years more than a million tourists have flocked annually to the whitewater rafting, mountain biking, hiking, and scenic wonders offered by Arches National Park, Canyonlands National Park, the Manti-LaSal National Forest, and other recreation areas. Conserving water, spreading the burdens and benefits of tourism more equitably throughout the area, and enhancing the livability of communities for residents are key issues faced by local leaders. The projects adopted for design assistance by the Castleland RC&D Council included conceptual design for the restoration and enhancement of Crystal Geyser, one of three large, cold-water geysers west of the Rocky Mountains; analysis of alternative sites and recommendations to the Navajo Nation for a new fairground; and urban forestry planning in several small communities.

Enhancing a Flood Control Project

Castleland RC&D, Utah

In Moab, Utah, there is probably a larger mix of outlooks on the environment and related values than in any other town in Utah. It became apparent that we couldn't move very fast, that we had to include the public in the decisionmaking, to get as many people into that process as were willing to participate.

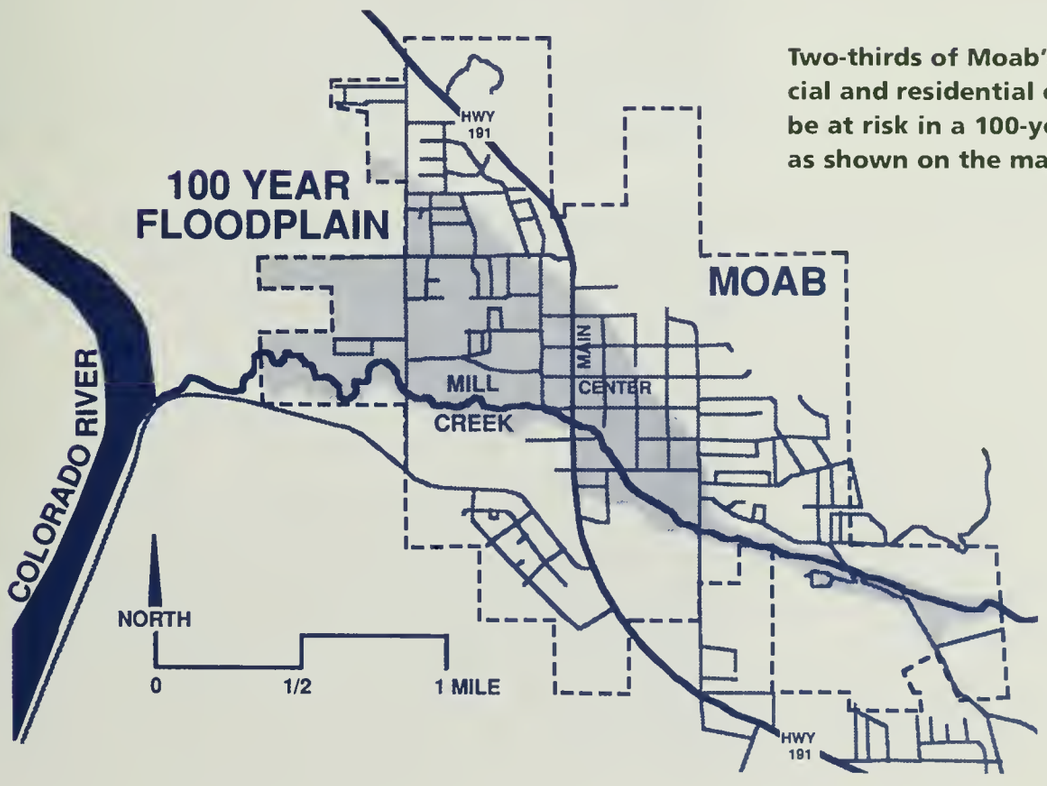
Ken Ruhnke
Castleland RC&D

Southeastern Utah, including Moab, does not suffer from a shortage of tourist interest. In recent years, more than 1 million people annually have been attracted to recreation areas like the Green and Colorado Rivers, Manti-LaSal National Forest, Arches and Canyonlands National Parks, and the millions of acres under stewardship of the U.S. Bureau of Land Management. In addition, Moab, like many small cities in the desert Southwest, has faced the prospect of infrequent, yet major, flooding when the nearby LaSal Mountains experience unusually high rainfall or rapid snowmelt.

When the city asked the U.S. Army Corps of Engineers to investigate long-term flood control measures along Mill Creek, it also asked the Castleland RC&D to look into ways that flood control could be modified to improve recreational opportunities, aesthetic values, and habitat. The 1992 Corps of Engineers study evaluated a full range of flood protection measures, and was used as the basis for a broader Sixteen-Year Flood Control Project with Recreational Amenities plan, prepared by RC&D landscape architect Ken Ruhnke working with Moab city planner Kathlyn Collins. The plan was developed with the help of a citizens advisory committee and representatives from the Corps of Engineers, State Divisions of Wildlife and Water Rights, State Department of Agriculture, Grand County Soil Conservation District, Moab Irrigation Company, and Castleland RC&D. The plan developed by Ruhnke and the team identified ways to control flooding without sacrificing aesthetic values or wildlife habitat. It also incorporated recreational opportunities, including a proposed Mill Creek Trail system to provide access to existing public lands and valuable pedestrian and bicycle links within the community.

"The Mill Creek project demonstrates the expertise that a landscape architect can bring to a community in non-traditional design of flood control alternatives," Ruhnke said. "Small communities are often overwhelmed when trying to undertake a large, costly, complex engineering project. The projected costs boggle the mind, engineers speak in a technical language that is foreign to the public, and citizens sometimes do not learn about what is going on until the construction equipment is in their backyards." Through production of two videos, one aired on local cable television; open houses; and a variety of flyers, brochures, and newspaper articles, Ruhnke said, "we got people to visualize the different options for flood control treatment on Mill Creek."

Existing conditions along Mill Creek and computer-generated simulation of potential improvements for public access and amenities. (Note: Although based on low-resolution video images, such simulations were very effective in communicating design concepts and alternatives to local decision-makers.)



Two-thirds of Moab's commercial and residential core would be at risk in a 100-year flood, as shown on the map below.

EXISTING
MILL CREEK
BIKE LANE
CONTOUR LINE
PROPERTY LINE
VEGETATION
BUILDING
PROPOSED
FLOOD CONTROL LEVEE
FLOOD CONTROL WALL
WALKWAY (PEDESTRIANS ONLY)
TRAIL (PEDESTRIANS AND BICYCLES)
RETAINING WALL
PARKING AREA
PRIVATE DRIVEWAY
TREES
100 SOUTH
100 WEST
MAIN
200 SOUTH
NORTH
SCALE

16 YEAR FLOOD
CONTROL PROJECT
WITH RECREATION AMENITIES
AND OTHER ENHANCEMENTS TO THE SECTION 205 RECONNAISSANCE REPORT FOR
FLOOD CONTROL, MILL CREEK AT MOAB, UTAH - OCTOBER 1992 - CORPS OF ENGINEERS
200 EAST
300 SOUTH
CREEK
100 EAST

Large public works projects, like that proposed for Moab, take years to implement. Another of Ken Ruhnke's activities, the Downtown Helper, Utah, River Enhancement Project, demonstrated how a designer can facilitate community improvement on a much smaller scale.

"It was originally sold as clean-up of a critical transient problem. But we knew it would be a major tourism draw. It's an incredible bang for the buck," said Ron Cooper, the project's coordinator in Helper. Community leaders in Price and Helper, about 100 miles from Moab, had long contemplated a hiking/biking trail to link the two cities, which are 10 miles apart on the Price River. A wide range of problems, including an unwillingness to spend tax dollars and the diversity of land ownership along the route, combined to impede the project.

But when Helper residents decided on the more modest goal of transforming a small section of the river, they gained momentum. The river in downtown Helper, next to the historic district, offered the advantages of being city-owned and close to local residents who would use the facility. And when the new mile-long park, complete with a pavilion, games areas, and fish habitat enhancements, was dedicated in May 1994, Helper had changed a community liability into "a major economic development project for Carbon County, Utah," said Cooper.

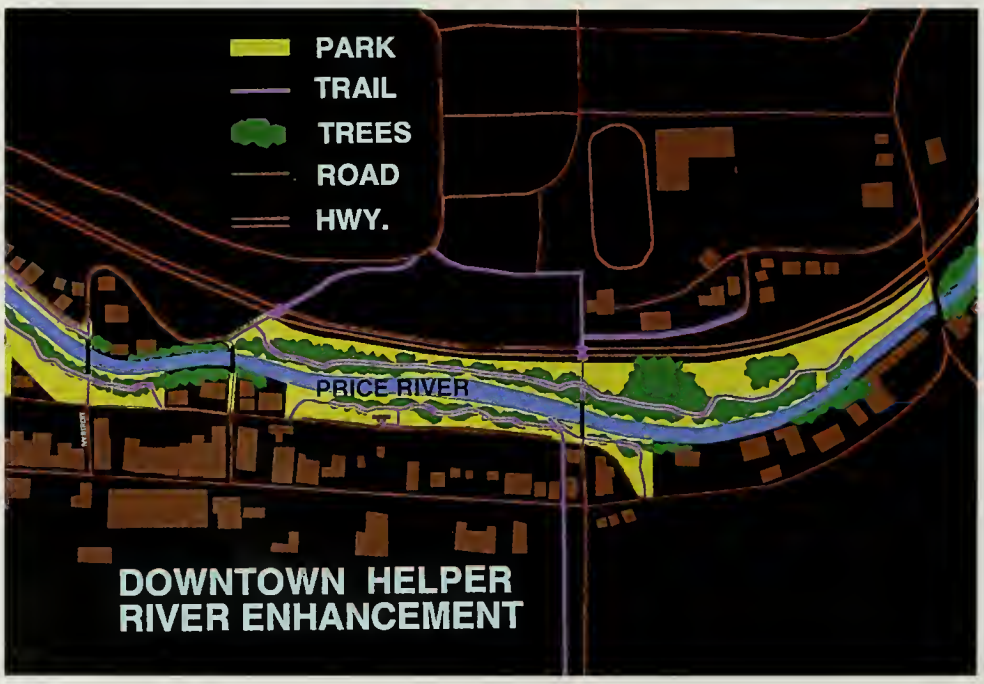
Conceptual plan for Mill Creek *(above)* uses hiking-biking trail to link schools, parks, and neighborhoods to the business district, while pinpointing opportunities for improved wildlife habitat. *Left:* Mill Creek Advisory Committee. *Below left:* Volunteers clear brush along the trail.

Cooper credited the Castleland RC&D and Ken Ruhnke with successfully communicating what the concept would mean to local residents. "The mainly senior citizens here thought that we were going to create a nice place for the hobos to live," Cooper said. "But through Ken's ability to communicate design alternatives and respond to questions, we alleviated fears. Cooperation from local citizens went to 99 percent, compared with 90 percent disapproval in the beginning."

Ruhnke began by helping to organize a committee in which concerned citizens and elected officials could explore alternatives. The downtown Helper area was chosen as the best demonstration site. He worked with the Utah Division of Wildlife and the City of Helper to develop a conceptual plan and cost estimates. Ruhnke later prepared conceptual drawings for the trail, signs, and parking, and recommended disability design guidelines.

"We've taken a $25,000 river enhancement grant," Cooper said, "and leveraging it eight to one with in-kind contributions created a mile-long, 8- foot-wide trail accessible to the disabled. It's a class act."

Historic commercial area adjacent to the Price River in Helper, Utah *(top right)*. Mayor Mike Dalpiaz *(top left)* and city council members at ground-breaking ceremony. Schematic plan drawn on computer *(below)* shows proposed project, now called the Helper City Centennial Parkway.



Top photo shows existing marshy land between cropland and forest. Simulating a restored wetland, the low-resolution image *(middle)* took 1/2 hour to construct; greater detail in the high-resolution simulation *(bottom)* required 8 hours of computer use by designer.

Visual Simulation Technology

Visual simulations have long been a tool in the arsenal of the professional designer, beginning with simple sketches and progressing to color renderings. With the appearance of affordable desktop computers capable of manipulating sophisticated landscape images, visual simulations have become a practical, cost-effective way of showing the visual consequences of land use decisions.

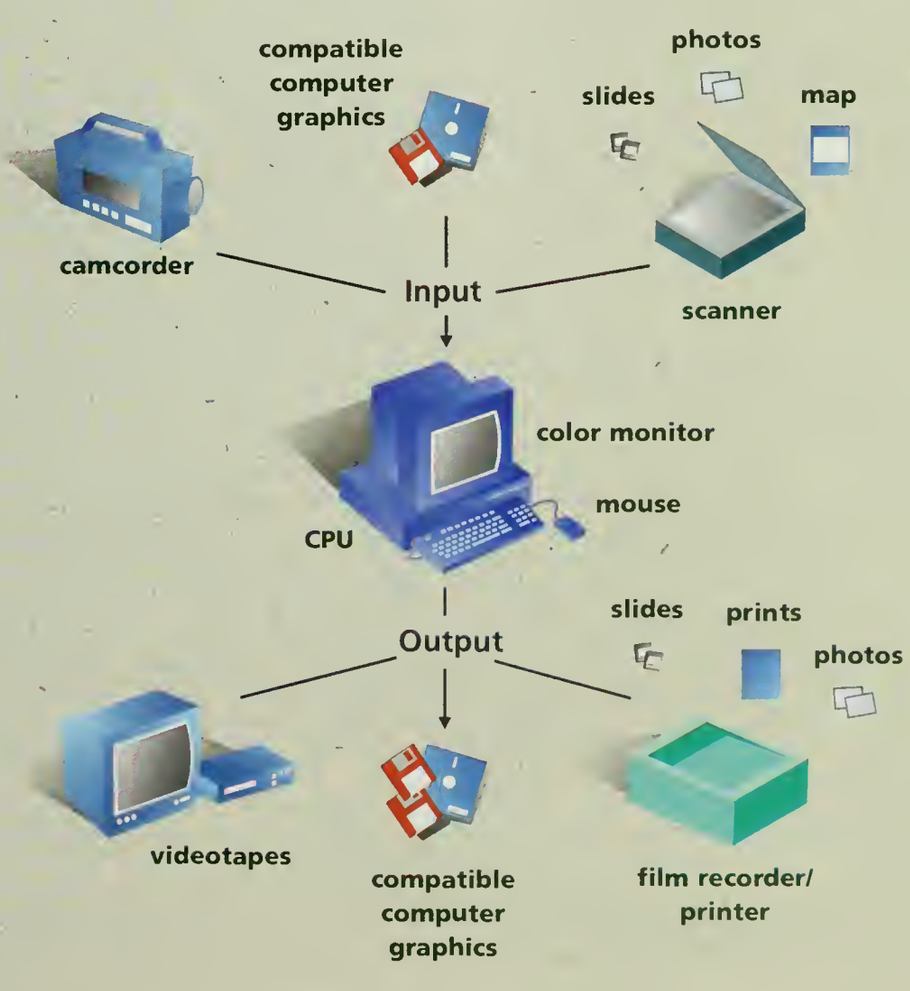
The computer field calls this technique image processing. The movie industry, for example, uses it to produce special effects. The same kinds of three-dimensional images provide valuable diagnostic information to the medical profession. The technology is useful whenever visual communication of ideas and designs can enhance understanding, and has been used by the Natural Resources Conservation Service since 1987 in planning, design, and environmental impact analysis.

The three landscape architects were enthusiastic, yet cautious, about the use of visual simulation. "I think it's very valuable," said Iowa's Mimi Askew. "In rural design and conservation, for example, it can play a very strong role as a communication tool."

"It was a tool," echoed Utah's Ken Ruhnke, "and I found that I used it quite a bit. The key to image processing is to use it when it is warranted."

Using either a video camera or a scanning device for print photographs or slides, images are captured as computer files. Once in the computer, different elements of the image can be moved or deleted, or other images can be imported to produce alternative scenarios.

Using the technology may be time-consuming—it can take a day's work to create a high-quality reconstruction of a given scene. However, it greatly extends the reach of the designer's ideas by showing both existing conditions and the impact of alternatives in context. The resulting simulations can be displayed in different formats—photographs, videos, television, or cable broadcasts—thereby enhancing citizen participation in the planning process.



Evaluating Rural Resources

Oconee River RC&D, Georgia

Madison County is an emerging county, and the study proved why a new crop of people has moved here—the important qualities of the landscape.

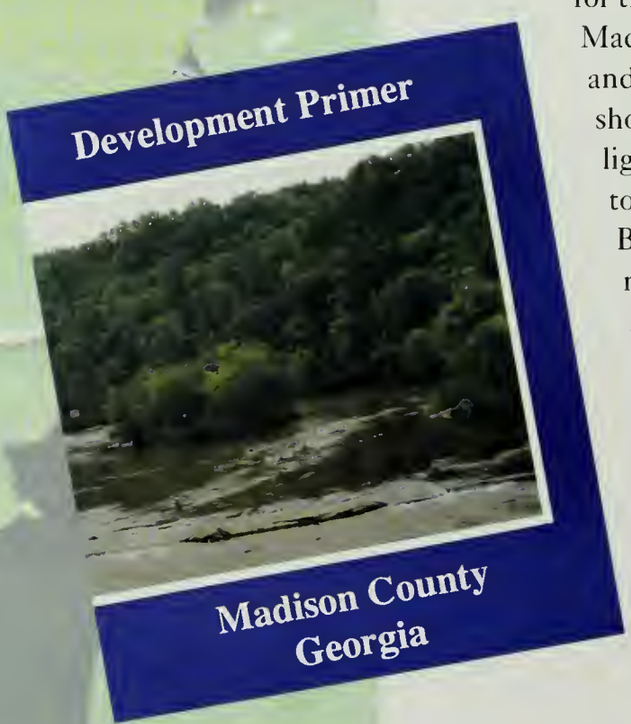
Barbarianne Russell
Executive Director, Madison County Chamber of Commerce

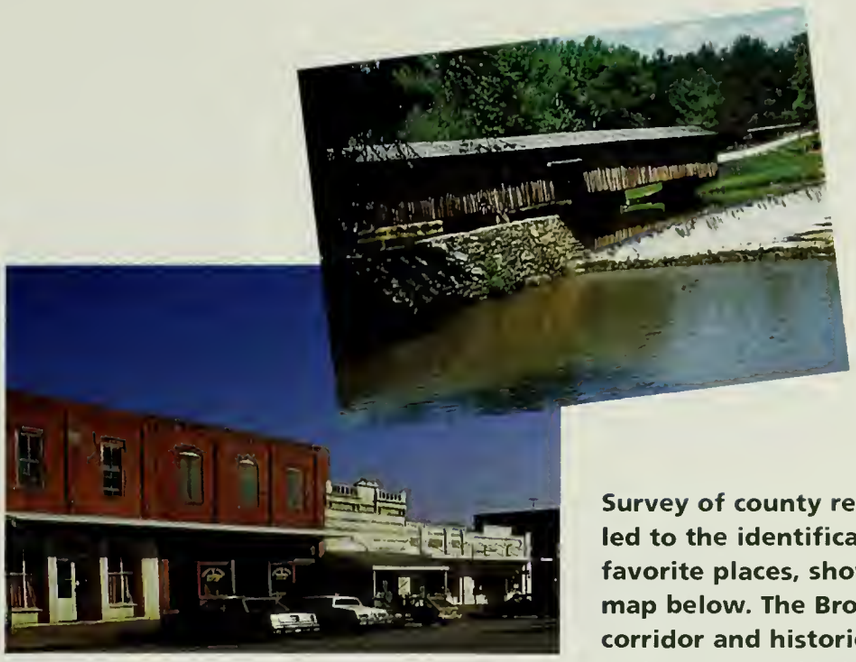
In 1989, the Georgia legislature required local governments to develop plans that would guide future growth. The Northeast Georgia Regional Development Center had prepared a comprehensive plan for Madison County by the end of 1990, which included a requirement to update it in 1995. In its land use section, the plan called for Madison County to "accommodate natural and planned growth in an efficient, practical and coherent manner without unreasonable intrusion into the rural, home town way of life of its people or destroying in an indiscriminate way the natural beauty evidenced in its landscape of gently rolling hills, wooded areas and open spaces."

This was the inspiration for the Madison County Landscape Assessment, which established a baseline of what residents thought about their environment in a county where, at least in the early 1990s, no billboards advertised fast food restaurants. Residents knew that change was coming, with a projected growth rate of nearly 20 percent in the next 10 years. The assessment was requested from the RC&D by the county-wide Chamber of Commerce in 1991.

Alison Krohn adapted the NRCS countryside assessment methodology for the Madison County study. Volunteers photographed different areas of the county in different land use categories, with emphasis on scenic quality, environmental integrity, or historical-cultural significance.

These photographs then were used to create posters and an accompanying questionnaire that provided a means of gathering the opinions of more than 350 county residents at various public functions. The resulting compilation, revealing local preferences for the county's landscape resources, was published as the Madison County Development Primer, which identified and described "environments where people want to live, shop and spend their free time." The booklet also highlighted residents' concern about the stewardship of historical sites and growing interest in protecting the Broad River watershed. Because of this interest, a newly formed land trust, the Broad River Watershed Association, was able to map the river corridor; and it used the information obtained to nominate the watershed to become one of Georgia's Regionally Important Resources, which could in turn lead to development of a management strategy for the area.

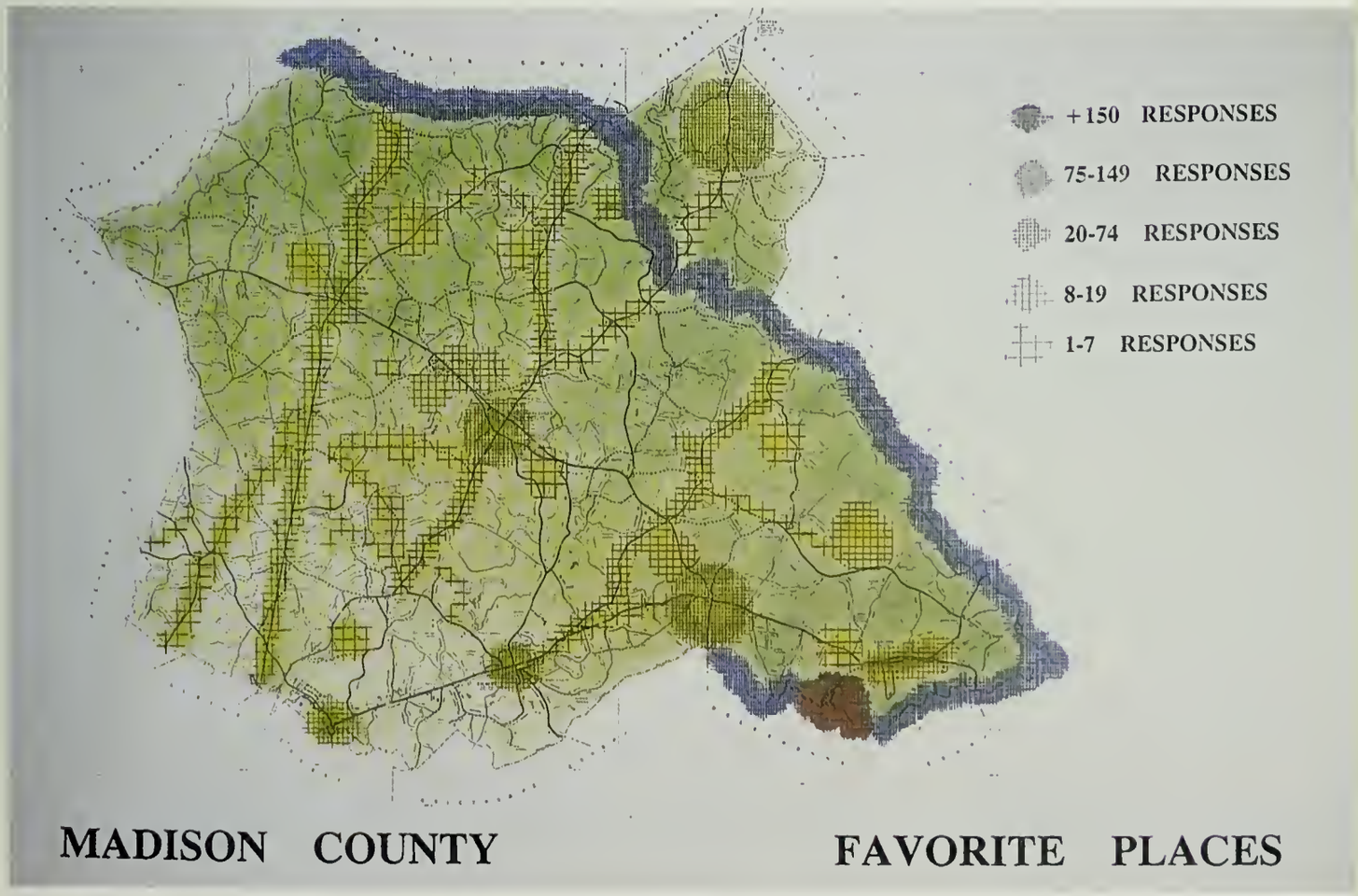


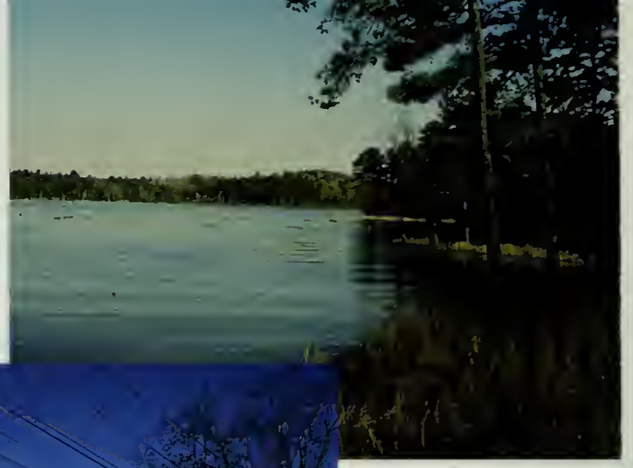


Survey of county residents led to the identification of favorite places, shown on the map below. The Broad River corridor and historic resources, such as covered bridges and Main Street areas, ranked high.

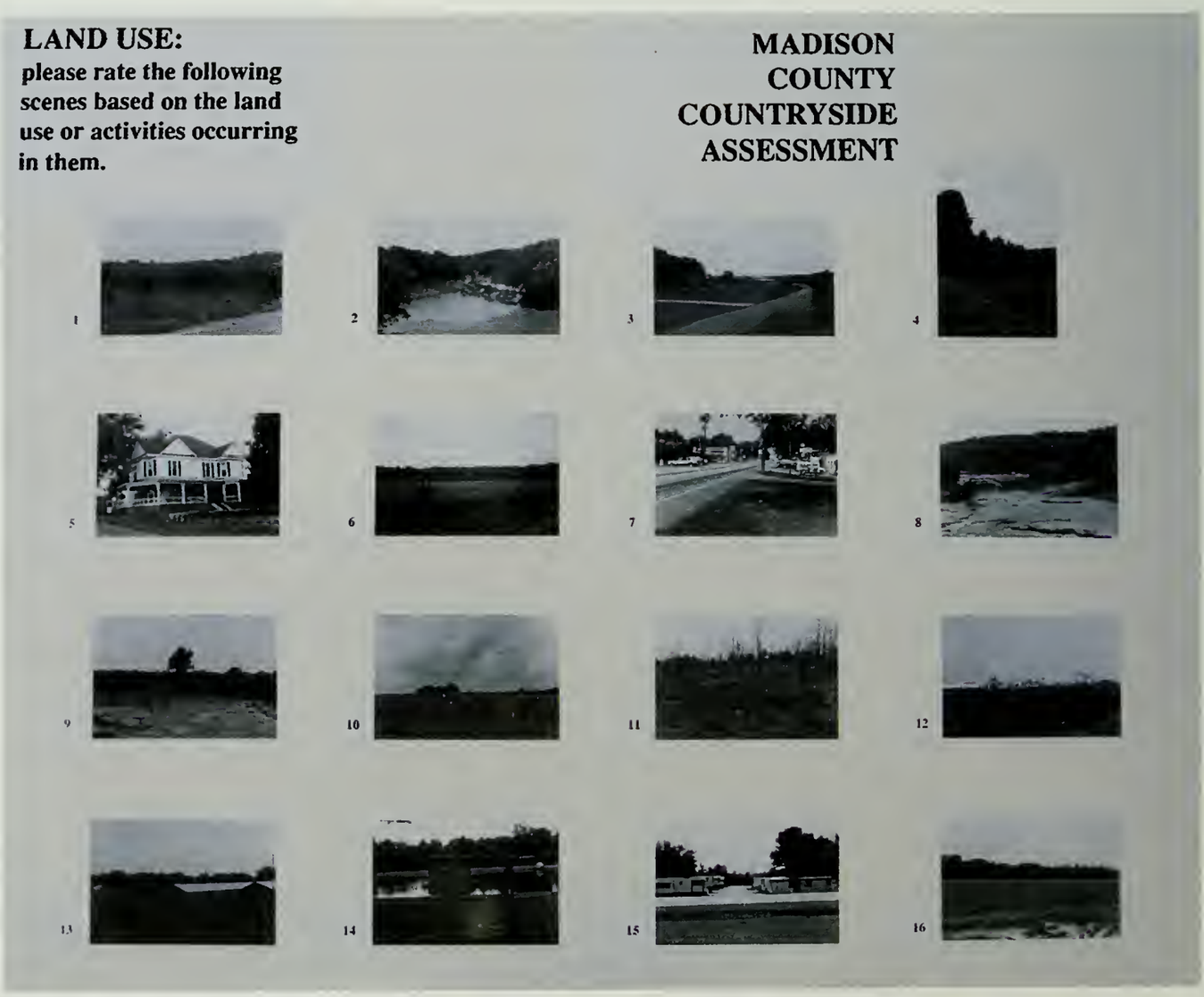
As a result of the landscape assessment, and because of the expanding pressures of economic development, Madison County enacted a zoning ordinance favoring agricultural uses in December 1993. Barbarianne Russell put it best: "We struggled for 7 years with the independent nature of rural people—they want to do just what they want with their land. We had to convince them that if they didn't have restrictions, they could lose what they valued most."

A design professional brought a lot to the discussion of the future in this rural society. "I see a need for similar expertise all across northern Georgia," said Mayor Hartel, "especially where we're talking about preliminary steps in a long-term project." The Regional Development Center is now weaving the process into its planning assistance for other Georgia counties.

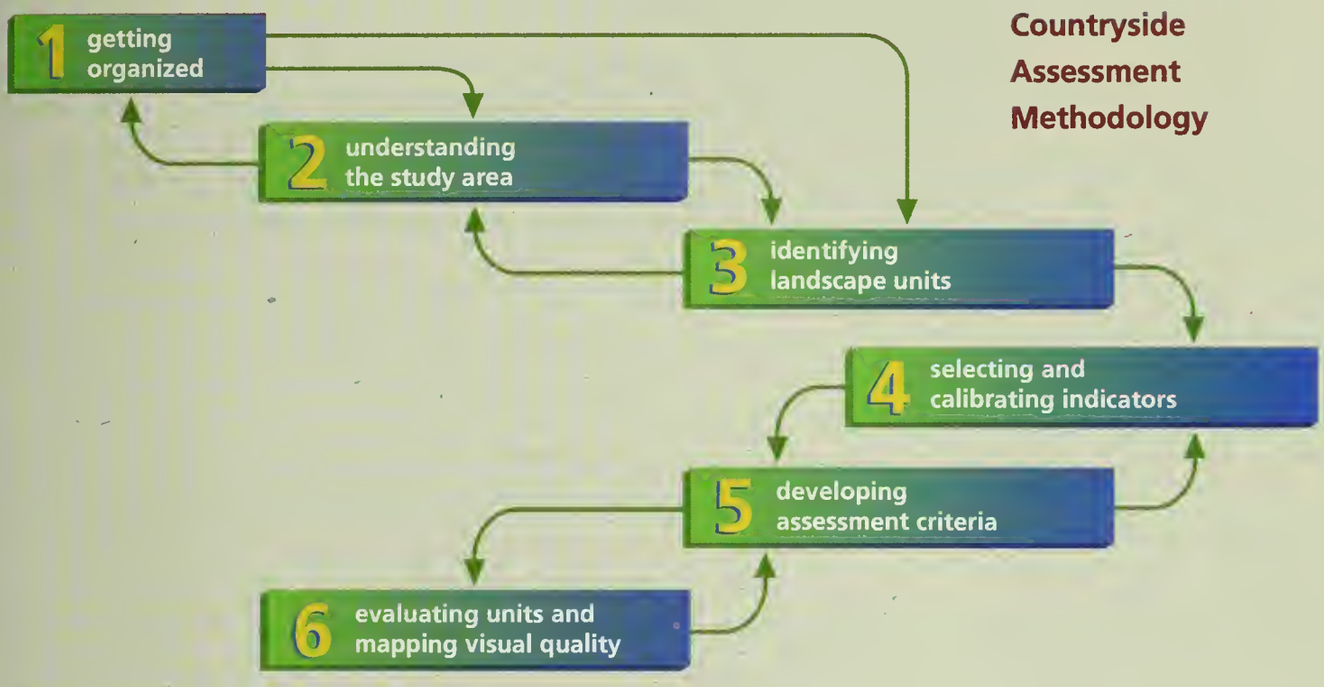




Residents rated commercial strips, trailer parks and poorly maintained farmland low, while favoring areas of natural beauty and recreation, traditional housing patterns, and signs of good stewardship. The *Development Primer (page 26)* summarized their preferences as a guide for future development and conservation efforts.



Countryside Assessment Process


Countryside Assessment Methodology
1 getting organized
2 understanding the study area
3 identifying landscape units
4 selecting and calibrating indicators
5 developing assessment criteria
6 evaluating units and mapping visual quality

Many people associate landscape architecture with site-specific projects such as public spaces, residential lots, and corporate office parks; not with the broad resource analysis, planning, and design skills used in the demonstration project. The three landscape architects were encouraged to use landscape assessment techniques where possible to involve local residents in the identification of resources and the articulation of their significance.

The jumping-off point for landscape assessment was the Natural Resources Conservation Service's countryside assessment process, a visual analysis methodology keyed to scenic values. Basically, the methodology attempts to break down the qualities of a landscape into its constituent parts: character, or harmony; uniqueness; fragility, or its ability to absorb change; fitness, or how well it is cared for; structure, or the way it looks formally; information, or how it engages the viewer; and, finally, its meaning in a cultural sense.

The process of assessing a landscape begins with finding volunteers willing to survey its scenic, natural, and cultural resources photographically. The results of the survey then are used to widen the reach of the assessment. Survey photographs and an accompanying questionnaire are used to give the public an opportunity to express preferences for different aspects of the landscape. The public also can be offered the opportunity to visualize the results of potential improvements in land use, using computer-generated images.

The process depends on the active involvement of the people it affects—the residents who, after all, will live with the decisions about land use that are taken. In both the Oconee River and Golden Hills RC&D areas, countryside assessments demonstrated that pragmatic involvement by design professionals in the rough-and-tumble of rural politics can make a difference.

Conserving Water Through Design

Castleland RC&D, Utah

Water is critical in the West. The aim of this project was to demonstrate the numerous ways—from conservation measures to appropriate plant selection—that public and private landowners can achieve both beauty and water efficiency.

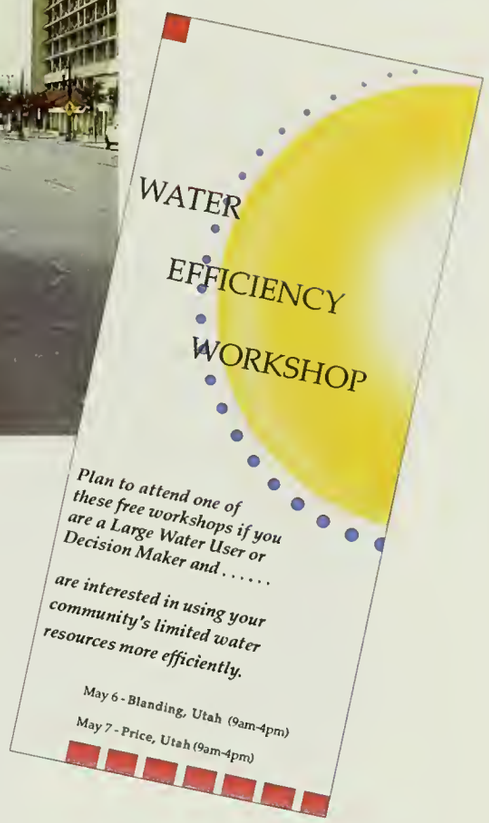
Ken Ruhnke
Castleland RC&D

The arid lowlands of southeastern Utah average from 4 to 8 inches of rainfall each year, and even less during drought conditions. The availability of water affects residents' ability to landscape homes and public spaces, grow crops, feed livestock, and develop businesses, tourism, and industry. For many years, the RC&D Council had listed water conservation as a high-priority goal, and when Ruhnke arrived it asked him to address the issue.

Ruhnke's preliminary research indicated that water consumption could be reduced dramatically. Forty percent of residential usage went to outdoor landscaping of non-native, water-intensive plantings, such as lawns, shrubs, trees, and flowerbeds. There were no educational programs directed at either the public or local government officials to encourage efficient water practices.

After surveying Western States on successful water conservation programs, Ruhnke and the RC&D staff developed and implemented a public information campaign that targeted the general public and water department managers, city council members, and mayors in the four-county RC&D area and on the nearby Navajo Reservation. With financial support from the Rural Community Assistance Corporation, "Water Efficiency Workshops" were held featuring speakers from the Rocky Mountain Institute, Utah Department of Water Resources, U.S. Bureau of Reclamation, and the City of Provo. The aim was to build effective partnerships among academics, plant specialists, public officials, business people, and the public.

Excessive irrigation *(left)* and water-demanding plants are inappropriate in semi-arid and arid landscapes. This residential development *(opposite, below)* uses drought-tolerant plants such as pinyon and mugo pines, yucca, sumac, barberry, and spirea.


WATER
EFFICIENCY
WORKSHOP
Plan to attend one of these free workshops if you are a Large Water User or Decision Maker and . . . . . .
are interested in using your community's limited water resources more efficiently.
May 6 - Blanding, Utah (9am-4pm)
May 7 - Price, Utah (9am-4pm)

One key goal of the educational campaign was to demonstrate the use of alternative landscape plants with low-water requirements appropriate to the area. To determine whether existing plant guides for the Southwestern United States would be suitable for the Castlelands area, Ruhnke assembled an interdisciplinary team which included an Extension Service horticulturist at Utah State University and a plant materials specialist, soil scientist, and range conservationist from NRCS. He prepared schematic designs for three demonstration landscapes to be installed at two public libraries and a museum in the area. He also secured a grant to enable the Extension horticulturist to produce a Horticultural Guide for Southeastern Utah, to be published by Utah State University in 1995 and distributed through county Extension offices.

Use of turf on median strip *(above)* results in high maintenance and water costs for municipalities. Water conservation options for both public and private landowners were addressed at workshops sponsored by the Castleland RC&D.

Trees to shade west side of library

Gravel strip under roof drip line to disperse water and landscape fabric to minimize weed growth

Children's story circle

Smooth edging stones installed flush with turf form low-maintenance hedge

Full-sun-tolerant turf demonstration plots

Sandstone gravel over landscape fabric to reduce evaporation and minimize weed growth

Earth berm to redirect runoff and increase infiltration into soil

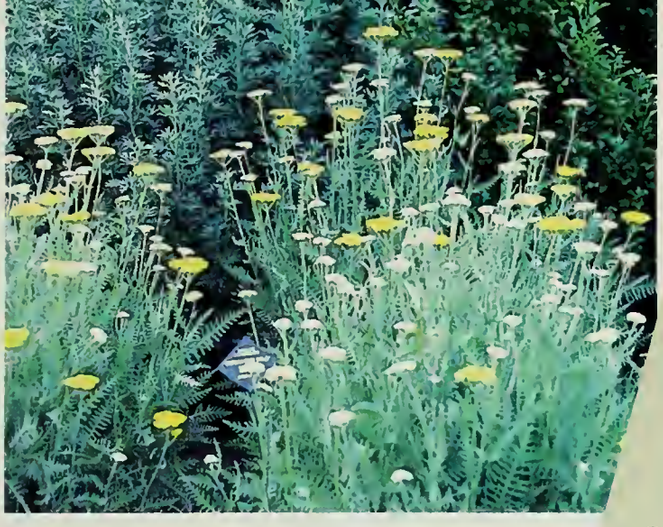
Native shrubs and perennials adjustable drip or bubbler irrigation routed to each plant

CLEVELAND LIBRARY
WATER-EFFICIENT LANDSCAPE

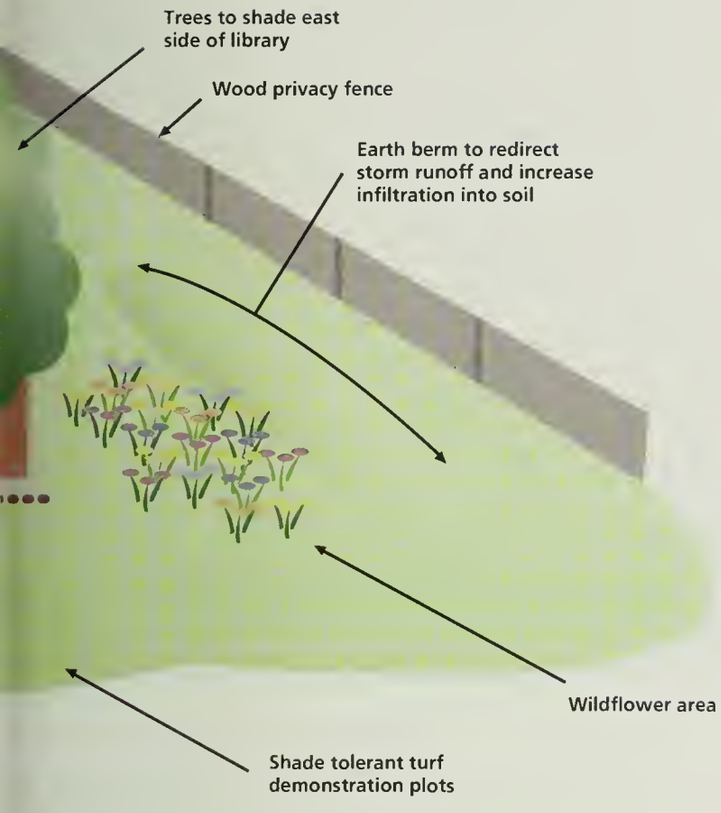
Ten irrigation zones and controller/timer allow maximum watering flexibility

Improve soil by mixing in silty loam and organic matter

This computerized version of a conceptual plan for the Cleveland Library emphasizes careful use of materials to conserve water. A "berm" of mounded earth increases penetration of stormwater into soil; landscape fabrics and mulch materials minimize evaporation and weed growth; and irrigation systems optimize watering efficiency for drought-tolerant, native vegetation. Surrounding trees reduce the library's energy consumption by providing shade in summer and sunlight in winter.



Selection and Culture of Landscape Plants in Utah
A Guide for Castleland RC & D Carbon, Emery, Grand, and San Juan Counties
Larry A. Rupp and Dana Libbey


Trees to shade east side of library
Wood privacy fence
Earth berm to redirect storm runoff and increase infiltration into soil
Wildflower area
Shade tolerant turf demonstration plots

Mesa County Library *(far left)*, Grand Junction, Colo., combines blue fescue, red-leaf rose, and manzanita for an attractive, drought-resistant landscape; microspray irrigation system *(left)* minimizes water waste, while gravel mulch retains moisture in soil. Above: Yarrow is among the species featured in Utah State University's plant guide for the RC&D area.

Expanding Environmental Education

Golden Hills RC&D, Iowa

The project has grown to a point where the city is bringing in two additional trails that will use the Nature Center as part of a trailhead. It's amazing the number of things that are tying together on this project. I've never seen so many people get so interested and step forward to help.

William P. Johnson
Superintendent, Iowa School for the Deaf

The 25-acre campus of the Iowa School for the Deaf in Council Bluffs provided Mimi Askew with an unusual opportunity: to develop an outdoor environmental learning center accessible to people of all abilities and to make the landscape part of the learning experience for 5,100 students at the school.

Askew prepared an inch-thick report that contains the overall conceptual design for the project. Initially, the idea had been "to use a very small plot in their backyard." After listening to school officials discuss the need for environmental education, and evaluating the limited opportunities for people with disabilities in the Council Bluffs-Omaha area, Askew proposed that the campus itself be converted into the Nature Center.

Instead of one small outdoor classroom, as envisioned in the original plan, Askew proposed a series of 21 exhibit areas ranging from a wetland to a prairie plains remnant to an exploration of Loess Hills habitat, all connected by a hard-surfaced path with accessible side pathways of different challenge levels. The plan recognized that the quality of the experience for visitors of various ages and abilities could be severely compromised unless close attention were paid to material selection, siting, construction specifics, and maintenance implications. For example, tactile and color-coded pavement strips will be installed in the main path for 36 inches before a person walking on the path encounters a change in path materials or a potential hazard. The plan also recommended guidelines for plant materials and furnishings that would complement campus buildings and urged careful consideration of installation and future maintenance requirements.

Having anticipated that phased installation of the Nature Center would take 5 to 10 years, Superintendent Johnson is optimistic that the timeframe will be much shorter due to local enthusiasm for the project. "This grew from a little idea into something much larger," he said. "We'll probably put a quarter of a million dollars into it. Right now, I see every penny of it being donated."

Sign *(above)* announces first phase of Nature Center implementation. *Right:* Teenagers at the school sow seeds to restore prairie grasses, while NRCS staff shows teachers and younger students how to plant trees. Over $208,000 has been raised thus far for these projects and for orchard expansion, wetlands construction, and arboretum planting.

Master plan *(pages 36-37)* addresses circulation patterns and relationship of the 21 proposed exhibit areas to campus facilities. Italicized information highlights uses and design features of each area. Together the plan and detailed report give the school a comprehensive framework for achieving, in phases, its vision of exemplary environmental education for both school and community users.

100 0 100 200 300

SCALE IN FEET

NORTH ARROW

WINDBREAK DEMONSTRATIONS

Forestry Education
Three Types of Windbreak Style Plantings
Open Space Left Between to Demonstrate Effects
Interpretive Signage

CONSTRUCTED WETLAND

Wildlife Biology and Biology Education
Finished Size 1.5 Acres wet area
Final depth of 6' - 18"
Minimum 50' Buffer Strip of Native Grass
Additional Habitat Plantings adjacent

FUTURE EXPANSION

Potential Overflow and Office Parking
Foot Bridge Access to Facility

PIONEER PLAINS REMNANT

Natural Plant Communities and History Education
Finished Size 4.25 Acres
Plantings to Simulate Those Found as Pioneers Travelled Through The Early Plains
Interpretive Historic Signage for Early Residents and Travellers including:
Native Americans
The Mormon Trail

NATIVE PLANT CENTER

Natural Plant Communities Education
14 Individual Plots of Prairie Plant Species Identification
Interpretive Signage

(adjacent cropland)

HIGHWAY 92

AMPHITHEATER

Seating for 45 Individuals
Wheelchair Space for 15 Individuals
Stage Area With Rear Vehicle Access

ORCHARD

Horticulture Education
Existing Orchard Operation
New Plantings Dwarf Species Low Branching and Easy Production
Fenced Perimeter
Opportunity to Display Fruit Harvesting Flowering and Pollination

HISTORIC GROVE FOREST

History, Government and Horticulture Education
Program Nationally Sponsored by AFA, a Part of Global Releaf
Trees Saved by Specimens Cared for by George Washington, Thomas Jefferson and Others
Interpretive Signage

SMALL TRIBUTARY

REST / PICNIC AREA

Open Space With Informal Seating
adjacent to central plaza

CHRISTMAS TREE PLANTATION

Agriculture Education
Finished size 0.65 acres
Forestry Education
Demonstrating Techniques and Planning for a Commercial Operation
Interpretive Signage

HISTORIC BARN

Restored Historical
Center for Natural Resource Information
Public Conference and Meeting Space
Visitor Center

LAWN TURF PLOTS

Horticulture Education
6 Samples of 4 Types of Different Species

BATTERED EXISTING FIELD

TENNIS COURTS

OPEN PLAY SPACE

Physical Education
Total Area 1.25 Acres
Allow for Organized Group Games and Activities

TRACK AND FIELD

EDGE OF EXISTING FIELD

SPECIALTY GARDENS

Horticulture Education
Various Specialty Gardens to Emphasize Ecosystems and Special Plant Species
Sensory Gardens for the Visually Impaired
Sensory Gardens for the Mentally Impaired

SOILS CLASSROOM

Soil Science Education
Formal Soil Pit Demonstration Site
Exposed Deep Soil Profile
Group Gathering Area

(adjacent urban open space)

RECYCLING DEMONSTRATION

Environmental Education
Changing Exhibits to include
Composting
Mulch versus Compost
Recycled Metal

GREENHOUSE AND SUPPORTING GARDENS

Horticultural Education
Teaching Greenhouse and Lab
Adjacent Outdoor Growing Area

AGROFORESTRY PLOT

Agriculture and Forestry Education
Rows of Walnut Trees Interplanted With Annual Companion Crops
9 - 15 year Multicropping Expectancy
Interpretive Signage

adjacent to natural area

ARBORETUM STYLE PLANTINGS

Horticulture Education
Informal Arrangement of Trees and Shrubs for Human

WILDLIFE HABITAT PLANTINGS
Wildlife Biology Education
Trees and Shrubs Specifically Selected For Their Ability to Support Wildlife
Demonstration For Home Landscaping
5' WIDE WALKING PATH (TYPICAL)
REST NODE (TYPICAL)
Bench Seating
Paved Pull Off Space
Some With Drinking Water
Shaded Areas
WABASH NATURE TRAIL
TRAILHEAD 1/4 MILE AHEAD
(adjacent public school grounds)
VALLEYVIEW DRIVE
HIGHWAY 275
LOESS HILLS RETREAT
Natural Communities Education
Total Area 2.15 Acres
Forest Vegetation
Dry, Upland Ridge Top Prairie Vegetation
Reptile, Amphibian, Insect and Butterfly Study
Scenic Overlook
Utilize Abandoned Road as a Trail to Access Ridge Top
Demonstration Garden With Plantings Suitable for Home Landscaping in the Loess Bluffs Area

The following goals will be addressed by this facility:

.Provide opportunities for the general public as well as adults and children with disabilities to receive formal or informal environmental education experiences,

.Provide a place for individuals with disabilities to mainstream with the general public, and

.Provide increased opportunities for improved mental and physical health of all users through exercise and interaction with the environment.

CAMPUS MASTER PLAN AUGUST 1992
IOWA SCHOOL FOR THE DEAF NATURE CENTER

". . . A public area dedicated to serve the comprehensive environmental needs of children and adults of all abilities, and their families; it will create informal opportunities for integration and interaction of individuals with a disability with others that do not have disabilities. . . "

Iowa School for the Deaf
GOVERNED BY THE STATE BOARD OF REGENTS

Golden Hills
Resource
Conservation and
Development

Mimi W. Askew
Project Planner
Landscape Architect
Council Bluffs, Iowa

SOIL CONSERVATION SERVICE
US DEPARTMENT OF AGRICULTURE

Results in Rural America

Throughout rural America, people are trying to create economies that work and yet sustain the natural resource systems and amenities that enhance the quality and character of their lives. The Natural Resources Conservation Service/NEA Rural Design Demonstration Project was an effort to show the benefits of integrating design into the process of rural change. While the 2-year project could not address many of the long-term problems faced by local communities, it did demonstrate much more clearly the issues, resources, and options involved. It also revealed the advantages that local communities can reap by involving design professionals in the day-to-day give-and-take of managing change. In Georgia, Iowa, and Utah, design professionals invigorated public participation in the decision-making process, and brought new technologies to bear on the subject of planning for the future physical shape of communities.

The vision of the Natural Resources Conservation Service is to help create "a productive nation in harmony with a quality environment," or in other words, to help communities develop economies, institutions, and a social fabric that can be sustained over time. Clearly, economic vitality rests on producing a profit for those who depend on land for their livelihood and for those whose business is providing goods and services in rural communities. Yet as Lyle Asell, Assistant State Conservationist for the Natural Resources Conservation Service in Iowa, points out, there is also another type of profit —"community profit" — which must be created if rural areas are to continue being vital, desirable places in which to live, work, and raise families.

Though not easily quantifiable in dollars and cents, community profit results when people invest their time and energy in examining resources and opportunities, discussing differences, sharing visions, and involving those less vocal or motivated. According to Asell, the Rural Design Demonstration Project showed the validity of the Natural Resources Conservation Service approach of delivering interdisciplinary skills to assist locally determined conservation and development projects. At the same time, it showed the benefits of broadening the array of skills available by adding the services of landscape architects as resident professionals familiar with local issues and able to involve more people in the process of shaping their future.

Some of the activities assisted by the landscape architects have a clear link to economic vitality, such as the attraction of tourist dollars to the Loess Hills region of Iowa through a new

scenic byway. Other examples, such as the routing of State Highway 72 and the revitalization of downtown Comer, Georgia, will take years to unfold. Yet as Mayor Dudley Hartel acknowledges, the work in Comer and across Madison County lays a foundation for sustainable economic development in the future. He sees the engagement of so many more citizens in the examination of issues and options as producing immediate community profit and predicts it will ultimately lead to more effective resource use and traditional economic benefits.

Achieving community consensus on the kind of economic diversity that is desirable, on where further development should be encouraged, and on what important natural and cultural resources exist and should be protected creates a framework within which both public and private investment decisions can be soundly made. A community with a firm sense of its heritage and a clearly articulated vision of how it wants to grow is particularly attractive to business owners and investors, who appreciate knowing what the ground rules are in any potential location. Similarly, a community that has evaluated its resources and enhanced recreational and other amenities to improve local quality of life is also more likely to induce its young people to stay and to attract new residents, visitors, and businesses.

Whether or not the projects described in this booklet reached or will reach implementation, all have laid a foundation for future action. In fact, each of the participating RC&Ds has made the services of a landscape architect a part of its continuing assistance activities.

The demonstration project clearly revealed the advantages of having a design professional resident in rural areas, and of making him or her an ongoing part of a team approach to rural conservation and sustainable development. Across the country, other communities are searching for ways to involve design professionals in their daily work of managing change in the environment. Two options are available through the RC&D framework. A design professional either can be hired as a Federal employee in the coordinator's office or can be retained through a mix of public and private contributions using the council's organizational structure and non-profit status. For more information on RC&Ds, including how to start one, contact your local office of the Natural Resources Conservation Service or its headquarters at PO Box 2890, Washington, DC 20013.

Additional Information and Assistance

Good places to begin looking for assistance from design professionals include offices of the U.S. Department of Agriculture's Natural Resources Conservation Service and Forest Service. The 275 RC&D offices, appropriate offices of State and local government, public and private universities that have design schools, and local or statewide organizations involved with conservation and development issues also are good sources, particularly those involved in economic development, community development, planning, and historic preservation issues. Regional councils of government and planning agencies also are well worth consulting.

Many universities and schools of design offer community service programs, although their scope and quality may vary depending on the involvement of faculty and the continuing turnover of students. Information on professional design practitioners, regional and statewide chapters of professional design associations, preservation organizations, and schools of design can be obtained from a number of sources, including:

American Society of Landscape Architects
4401 Connecticut Avenue, NW, 5th Floor
Washington, DC 20008
202/686-2752
(FAX) 202/686-1001
The ASLA is a national professional society representing private, public, and academic practitioners of landscape architecture. The Society's Open Committee on the Rural Landscape publishes a quarterly newsletter and provides a forum for members, other design professionals, and related organizations with an interest in agriculture and rural landscape issues. For information on the Open Committee, the nearest ASLA chapter, and accredited undergraduate and graduate programs in landscape architecture, contact the Society's headquarters in Washington, DC.

American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006
202/626-7300
(FAX) 202/626-7421
The American Institute of Architects is the Nation's principal professional society for licensed architects, with 301 chapters nationwide. The AIA's Community Design and Development Department provides technical assistance to cities and towns through two programs. Using volunteer architects, the department puts together Regional/Urban Design Assistance Teams that visit host communities to engage citizens in intensive design "charettes" or workshops that emphasize a multidisciplinary, problem-solving approach to local issues. For information on this and other AIA programs or for the address of the nearest chapter, call or write AIA headquarters in Washington, D.C. For information on the nearest school of architecture, call the Association of Collegiate Schools of Architecture at 202/785-2324 or (FAX) 202/628-0448.

American Planning Association Public Information Office
1776 Massachusetts Avenue, NW, 4th Floor
Washington, DC 20036
202/872-0611
(FAX) 202/872-0643
The American Planning Association is the Nation's principal membership society for professional land use planners. As a non-profit educational and research organization, the APA is devoted to protecting and improving both the built and natural environments. Based in its Chicago office (312/431-9100), the association's Planning Advisory Service provides research assistance and advice to communities across the country. Also located in Chicago is the Planners Bookstore, which carries a variety of publications devoted to smalltown and rural planning. The association's Small Town and Rural Planning Division, a network of planners and community leaders, publishes a quarterly newsletter examining issues affecting rural and exurban areas. The Public Information Office in Washington, D.C. can provide addresses for the nearest APA chapter, division members, and accredited schools of planning.

National Trust for Historic Preservation
1785 Massachusetts Avenue, NW
Washington, DC 20036
202/673-4000
(FAX) 202/673-4038
The National Trust is a private, non-profit membership organization chartered by Congress to foster appreciation of America's diverse cultural heritage and encourage the preservation of its historic environments. The organization has several specialized programs that may be of interest to rural communities. These include 1) the Rural Heritage Program, which provides information and limited technical assistance on rural planning and preservation issues, including scenic byways and heritage areas; 2) the National Main Street Center, which provides publications, training and technical assistance on the revitalization of downtown and neighborhood commercial districts; and 3) the Heritage Tourism Program, which assists individual communities and multi-county areas interested in developing and marketing sustainable tourism based on cultural and historic resources. In addition, the Trust operates seven regional offices, which advise local communities on basic preservation procedures and are the initial point of contact for the organization's grant and loan funds. For information on these and other programs, contact the Trust's Response Center which also has information on undergraduate and graduate programs in historic preservation.

Design Access
401 F Street, NW, Suite 322
Washington, DC 20001
202/272-5427
(FAX) 202/272-5432
Design Access is a national information and resource center for the design disciplines, created under the auspices of the National Endowment for the Arts and the National Building Museum. It maintains a database listing all grants awarded by the Endowment's Design Program and a non-lending library of all final reports and products submitted. Design Access also maintains a national design events calendar and a database of information on non-profit, professional, academic and advocacy organizations serving the design disciplines and related fields. Information specialists can provide free searches and print-outs of these databases and will produce photocopies of final grant reports for a nominal charge.

Project Documents

For additional copies of *Managing Change in Rural Communities: The Role of Planning and Design*, call the Soil and Water Conservation Society at 1-800-THE-SOIL. Case studies and topical reports related to the Rural Design Demonstration Project are available from the following locations:

Case Studies

Oconee River RC&D
10 White Hall Road
Suite A
PO Box 247
Watkinsville, GA 30677

- Madison County Landscape Assessment
- Comer, Georgia, Highway 72 Analysis and Visual Simulation
- Sidney Station Farm Constructed Wetland

Golden Hills RC&D
120 North Main Street
PO Box 536
Oakland, IA 51560

- Iowa School for the Deaf Nature Center Master Plan
- Loess Hills Scenic Byway
- Loess Hills Landscape Resource Study

Castleland RC&D
PO Box 141
652 W. Price River Drive
Price, UT 84501

- Mill Creek Flood Control and Recreation Project
- Water Conservation Issues and Techniques
- Crystal Geyser Restoration and Enhancement

Topical Reports

National Landscape Architect
USDA, Natural Resources Conservation Service
PO Box 2890
Washington, DC 20013

- An Introduction to Image Processing for Visual Simulation
- The Use of Visual Simulation in Rural Design and Development: The SCS Experience
- Countryside Assessment

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